## WE CLAIM:

- 1. A solid antiperspirant and/or deodorant composition exhibiting a low white residue on human skin of less than 0.55 as measured by a reflectometer on the composition applied to a human underarm which composition comprises:
- (a) from 4-15% by weight based on the total weight of the composition of at least one siliconized polyamide of Formula IIIA as a primary gellant:

Formula IIIA

10 where:

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- (1) DP is a number in the range of 5-30;
- (2) n is a number selected from the group consisting of 20-200;
- (3) X is a linear or branched chain alkylene having 1-30 carbons;
- (4) Y is selected from the group consisting of linear and branched chain alkylenes having 1-40 carbons, wherein:
  - (A) the alkylene group may optionally and additionally contain in the alkylene portion at least one of the members of a group consisting of (i) 1-3 amide linkages; (ii) C5 or C6 cycloalkane as a cycloalkylene linkage; and (iii) phenylene optionally substituted by 1-3 members selected independently from the group consisting of C1-C3 alkyls; and
  - (B) the alkylene group itself may optionally be substituted by at least one member selected from the group consisting of (i) hydroxy; (ii) C3-C8 cycloalkane; (iii) 1-3 members selected independently from the group consisting of C1-C3 alkyls; phenyl optionally substituted by 1-3 members selected independently from the group consisting of C1-C3 alkyls; (iv) C1 C3 alkyl hydroxy; and (v) C1 C6 alkyl amine; or  $Y = Z^2$  where

$$Z^2 = R^{20} - T - R^{21} - R^{22}$$

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 $R^{22}$  wherein each of  $R^{20}$ ,  $R^{21}$  are independently selected from the group consisting of linear and branched C1-C10 alkylenes;  $R^{22}$  is selected from the group consisting of

linear and branched C1-C10 alkanes; and T is selected from the group consisting of (i) a trivalent atom selected from N, P and Al; and (ii) -CR, where R is selected from the group consisting of hydrogen, methyl, ethyl, propyl, isopropyl, a siloxane chain, and phenyl, wherein the phenyl may optionally be substituted by 1-3 members from the group consisting of methyl and ethyl; and

(5) each of R<sup>1</sup> - R<sup>4</sup> is independently selected from the group consisting of methyl, ethyl, propyl, isopropyl, a siloxane chain, and phenyl, wherein the phenyl may optionally be substituted by 1-3 members from the group consisting of methyl and ethyl;

wherein the polyamide of Formula IIIA has:

- (i) a silicone portion in the acid side of the polyamide;
- (ii) an average molecular weight of at least 10,000 daltons; and
- (iii) a polydispersity of less than 20;
- (b) a co-gellant which is up to 10 weight % of at least one member selected from the group consisting of N-acyl amino acid derivatives; dibenzylidene sorbitol; N,N'-hexamethylenebis-(10-undecenamide); amine stearate; 12-hydroxystearic acid; stearyl alcohol and waxes;
- (c) a solvent system for the primary gellant and co-gellant in an amount of up to 90%; and
- (d) a high density antiperspirant active having a bulk density of at least 0.45 g/cm<sup>3</sup> and used in an amount to have a deodorant and/or antiperspirant effect;

wherein all amounts are in percent by weight based on the total weight of the composition.

- 2. A composition as claimed in Claim 1 wherein the amount of co-gellant is in the range of 0.5-2.0% by weight based on the total weight of the composition.
- 3. A composition as claimed in Claim 1 wherein the co-gellant comprises up to 5 weight % of one or more members selected from h group consisting of dibutyl lauroyl glutamide; dibenzylidene sorbitol; N,N'-hexamethylenebis-(10-undecenamide); amine stearate; 12-hydroxystearic acid; stearyl alcohol and castor waxes.
- 4. A composition as claimed in Claim 1 wherein the co-gellant is dibutyl lauroyl glutamide.
  - 5. A composition as claimed in Claim 1 wherein the average molecular weight of the polyamide is at least 30,000 daltons.
- 6. A composition as claimed in Claim 1 wherein the average molecular weight of the polyamide is in the range of 80,000-150,000 daltons.
  - 7. A composition as claimed in Claim 6 wherein the average molecular weight of the polyamide is in the range of 80,000-90,000 daltons.
  - 8. A composition as claimed in Claim 6 wherein the average molecular weight of the polyamide is in the range of 90,000-120,000 daltons.
- 9. A composition as claimed in Claim 1 wherein the polyamide has a polydispersity of less than 10.

- 10. A composition as claimed in Claim 6 wherein the polyamide has a polydispersity of less than 10.
- 30 11. A composition as claimed in Claim 8 wherein the polyamide has a polydispersity of less than 10.

- 12. A composition as claimed in Claim 1 wherein the polyamide has a polydispersity of less than 4.
- 13. A composition as claimed in Claim 6 wherein the polyamide has a polydispersity of less than 4.
  - 14. A composition as claimed in Claim 8 wherein the polyamide has a polydispersity of less than 4.
- 10 15. A composition as claimed in Claim 1 wherein the DP is a number in the range of 12-18.
  - 16. A composition as claimed in Claim 6 wherein the DP is a number in the range of 12-18.
- 17. A composition as claimed in Claim 8 wherein the DP is a number in the range of 12-18.
  - 18. A composition as claimed in Claim 1 wherein the DP is 15.
  - 19. A composition as claimed in Claim 6 wherein the DP is 15.
  - 20. A composition as claimed in Claim 8 wherein the DP is 15.
- 25 21. A composition as claimed in Claim 1 wherein for the polyamide of Formula IIIA, R<sup>1</sup> R<sup>4</sup> are each methyl.

22. A composition as claimed in Claim 1 wherein the polyamide is a polyamide of Formula IIIB:

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Formula IIIB

where DP is from 5-30 and n is a number in the range of 20-200 and is selected to give an average molecular weight of at least 10,000 daltons.

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- 23. A composition as claimed in Claim 22 wherein the polyamide has a molecular weight in the range of 90,000-120,000.
- 24. A composition as claimed in Claim 22 wherein the DP is from 12-18.

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25. A composition as claimed in Claim 24 wherein the DP is 15.

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26. A composition as claimed in Claim 1 wherein for the polyamide of Formula IIIA, X, Y, DP and  $R^1$  -  $R^4$  remain the same in each polymeric unit.

27. A composition as claimed in Claim 1 wherein the polyamide of Formula IIIA, contains multiple siloxane block lengths of Formula IIIC:

Formula IIIC

where X, Y, n, and R<sup>1</sup> - R<sup>4</sup> have the meanings described for Formula IIIA; m is selected from the same group as n, and n and m denote the total number of units enclosed within the brackets in a regular, alternating, block or random sequencing; R<sup>5</sup> - R<sup>8</sup> is selected from the same group as defined for R<sup>1</sup> - R<sup>4</sup>; DP1 and DP2 may be the same or different and are each independently selected from the same group as defined for DP; and the units denominated by n and m may be structured to form either block or random copolymers.

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- 15 28. A composition as claimed in Claim 27 wherein for block lengths of Formula -IIIC, all of the R groups are methyl.
  - 29. A composition as claimed in Claim 27 wherein for block lengths of Formula IIIC, DP1 = DP2.
  - 30. A composition as claimed in Claim 1 wherein the solvent system comprises one or more members selected from the group consisting of:
    - (1) from 5-65% by weight based on the total weight of the composition of at least one non-silicone organic selected from the group consisting of C12-36 esters; guerbet alcohols having 8-30 carbons; fatty alcohols having 8-30 carbons; ethoxylated and propoxylated alcohols having 3-30 carbons; alkyl ethers having 12-36 carbons; C12-18 alkyl benzoate and benzoate ester derivatives; paraffins

having a distillation temperature in the range of 372-426 degrees C; isoparaffins having a distillation temperature in the range of 178-207 degrees C; and C6-30 alkyl carbonates.

- (2) from 2-55% by weight based on the total weight of the composition of a volatile silicone selected from the group consisting of cyclomethicones and low viscosity dimethicones;
- (3) from 0-10% organo-silicones; and
- (4) from 0-40% of a functionalized silicone.
- 31. A composition as claimed in Claim 30 wherein the solvent system comprises one or more members selected from the group consisting of: tridecyl neopentanoate, ethyl oleate, dioctyl carbonate, isopropyl myristate, octyl methoxycinnamate, PPG-14 butyl ether, PPG-3 myristyl ether, dioctyl ether, C12-15 alkyl benzoate, isostearyl benzoate, octyl dodecyl benzoate, octyl salicylate, dioctyl carbonate, octyldodecanol, and isostearyl alcohol.
  - 32. A composition according to any one of Claims 1-31 wherein the composition is an opaque suspension.
- 20 33. A composition according to any one of Claims 1-31 which is made as an emulsion which is translucent to-opaque.
  - 34. A composition according to any one of Claims 1-31 wherein the bulk density of the antiperspirant active is greater than 0.61 g/cm<sup>3</sup>.

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- 35. A composition according to any one of Claims 1-9 which is made as an emulsion and which additionally comprises as a solvent for the antiperspirant active a member of the group consisting of:
  - (a)  $\leq 25$  weight % water;
- (b) ≤ 35 weight % of a glycol or polyglycol selected from the group consisting of ethylene glycol, propylene glycol, 1,2-propanediol, diethylene glycol, triethylene glycol, tetraethylene glycol, dipropylene glycol, tripropylene glycol, methyl propanediol, 1,6-hexanediol, 1,3-butanediol, 1,4-butanediol, PEG-4 through PEG-100, PPG-9 through PPG-34, pentylene glycol, neopentyl glycol,
- trimethylpropanediol, 1,4-cyclohexanedimethanol, 2,2-dimethyl-1,3-propanediol, 2,2,4,4-tetramethyl-1,3-cyclobutanediol; and
  - (c)  $\leq$  35 weight % of a water and glycol or polyglycol mixture where the glycol and polyglycol are selected from (b); in an amount sufficient to dissolve the antiperspirant active.
  - 36. A composition according to any one of Claims 1-9 which is made as an emulsion and which additionally comprises as a solvent for the antiperspirant active a member of the group consisting of:
    - (a)  $\leq 25$  weight % water;
- (b) ≤ 35 weight % of a glycol or polyglycol selected from the group consisting
  of propylene glycol, dipropylene glycol, tripropylene glycol, 2-methyl-1,3-propanediol, methyl propylene glycol, low molecular weight (less than 600)
  polyethylene glycol, low molecular weight (less than 600) polypropylene glycols; and
- (c) ≤ 35 weight % of a water and glycol or polyglycol mixture where the glycol
  and polyglycol are selected from (b);
  in an amount sufficient to dissolve the antiperspirant active.

- 37. A composition as claimed in Claim 1 comprising at least one additional ingredient selected from the group consisting of volatile silicones, silicone gums, elastomers, polymethylmethacrylate, polyethylene, polypropylene, polytetrafluoroethylene emollients, colorants, antibacterial agents, inorganic particulates and fragrances.
- 38. A composition as claimed in Claim 1 comprising 5-20% on an anhydrous basis of an antiperspirant active.